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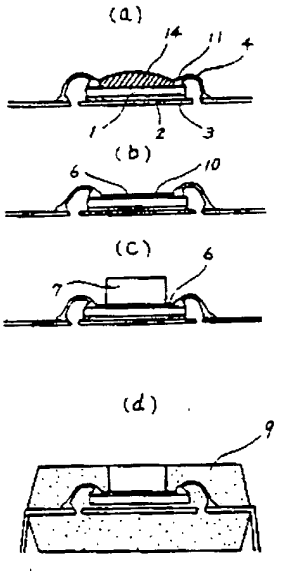
TITLE : RESIN-SEALED SEMICONDUCTOR DEVICE



ABSTRACT : PURPOSE: To contrive improvement in resistance both to temperature cycling and to moisture of the title semiconductor device by a method wherein a transparent resin layer of a specific thickness is formed on the surface of the semiconductor element located on the circumference of a bonding wire by coating the solution, consisting of transparent resin and a low boiling point solvent, the solvent is removed, and the transparent resin is cured by heating.

CONSTITUTION: A solution 14, consisting of transparent resin and a low boiling point solvent, is dripped on the semiconductor element 1 attached to the island part 3 of a lead frame through a mounting member 2, the solution 14 is coated on the whole area of the surface 10 of the semiconductor element 1 and on a part of the ball part 11 of a bonding wire 4, and a transparent resin layer 6 of 1~300 μm in thickness is formed on the surface 10 of the semiconductor element by removing the solvent by evaporation in the state wherein the coated material is left in the temperature of a room. Then, a transparent member 7 is provided thereon, the layer 6 is cured by heating, this structure is provided in a metal mold, sealing resin 9 is poured therein, the resin is cured by heating, it is picked out from the metal mold, the lead frame is cut and bent, and a semiconductor device is formed. As a result, the resistance to temperature cycling and the moisture resistance of the title semiconductor device can be improved by a simple process.